

REMARKS

The Examiner has rejected claims 1, 3 through 10, 11, 13 through 20, 21 and 23 through 30 under 35 U.S.C. §103 in view of the Ohata et al. reference in view of the Dekimpe et al. reference. However, the Examiner has objected to claims 2, 12 and 22 and has indicated allowable subject matter if the objected claims are rewritten in independent form including all of the limitations of the base claim and any intervening claims. In view of the following remarks, Applicant respectfully requests the Examiner to reconsider the above rejections.

The Section 103 Rejections

The Examiner has rejected claims 1, 3 through 10, 11, 13 through 20, 21 and 23 through 30 under 35 U.S.C. §103 in view of the Ohata et al. reference in view of the Dekimpe et al. reference. The Examiner has pointed out with respect to independent claims 1, 11 and 21 that the Ohata et al. reference allegedly teaches “inputting a definition of a data model of multidimensional data, which includes a definition of a data structure of the data model and a definition of data of the data model” at lines 1 through 31 in column 6 and in figures 4 through 6. The Examiner has also pointed out with respect to “a data storage unit” that the Ohata et al. reference allegedly teaches “storing hierarchy (layer) rule definition data, hierarchy structure definition data, database data, input data, hierarchy structure information and hierarchy rule” at lines 1 through 31 in column 6; lines 41 through 53 in column 8 and in figures 4 through 6. The Examiner has pointed out with respect to “a layer rule management unit” and “a layer structure information management unit” that the Ohata et al. reference allegedly teaches “managing the hierarchy rule based upon the hierarchy rule definition data and managing the hierarchy structure information based upon the hierarchy structure definition data” at line 1 in column 6 through line 53 in column 8 and in figures 4 through 7. Lastly, the Examiner has pointed out with respect to “a multidimensional database management”

that the Ohata et al. reference allegedly teaches “inputting the input data in the database data” at lines 22 through 40 in column 5 and in figures 4 through 7.

Despite the above allegations, the Examiner has conceded that the Ohata et al. reference “does not explicitly disclose a layer structure information update unit for registering the layer information at the layer structure information.” For the lack of the above disclosures, the Examiner has cited the DeKimpe et al. reference in the Abstract and at lines 11 through 32 in column 15. The Examiner has pointed out that the cited portion of the DeKimpe et al. reference allegedly teaches “a created multidimensional model can be updated in relation to the hierarchy(layer) information at the hierarchy(layer) structure information for improving data analysis.” In view of the following remarks, Applicant respectfully request the Examiner to reconsider the pending rejection under 35 U.S.C. §103.

Independent claims 1, 11 and 21 each explicitly recite “generate [or generating] layer information for the input data” in its absence. Subsequently, independent claims 1, 11 and 21 also each explicitly recite “registering the layer information at the layer structure information.” In other words, the current invention as explicitly recited in independent claims 1, 11 and 21 calls for “the layer information” to be generated and registered “at the layer structure information” for a newly inputted data.

In contrast to the current invention, the disclosures of the cited references alone or in combination fail to teach, disclose or suggest the above patentable features as explicitly recited in independent claims 1, 11 and 21. The Ohata et al. reference discloses at lines 39 through 50 in column 11 the step 108 in figure 1, where it is determined whether or not the page for the entry has been already assigned. When it is determined in the step 108 that the page has not been assigned, an unused page is assigned in the step 109. In the step 110, “the page number of the page assigned in step 109 is registered in the page number field 803 of the page index entry examined in step 108 and the process

proceeds to step 111.” The Ohata et al. reference also discloses at lines 49 through 61 in column 17 the step 1603 in figure 16, where it is determined whether or not the page for the entry has been already assigned. When it is determined in the step 1603 that the page has not been assigned, an unused page is assigned in the step 1604. In the step 1605, “the page number of the page assigned in step 1604 is registered in the page number field 803 of the page index entry examined in step 1603 and the process proceeds to step 1606.” As described above, no “layer information” is generated in the absence of the corresponding entry.

Similarly, the DeKimpe et al. reference also fails to teach, disclose or suggest the above patentable features as explicitly recited in independent claims 1, 11 and 21. The Examiner has pointed out that the cited portion of the DeKimpe et al. reference allegedly teaches “a created multidimensional model can be updated in relation to dimension members for better analysis” in the Abstract and at lines 11 through 32 in column 15. The DeKimpe et al. reference discloses that “a user has to nominate a member for that dimension with which the current data in the cube is associated.” Although the values in the added member may be “initialized” as disclosed at lines 24 through 32 in column 15, no “layer information” is generated.

As discussed above, the cited references alone or in combination fails to teach, disclose or suggest “the layer information” to be generated and registered at “the layer structure information” for a newly inputted member as explicitly recited in independent claims 1, 11 and 21. Thus, it would not have been obvious to one of ordinary skill in the relevant art to provide the patentable features as explicitly recited in independent claims 1, 11 and 21 based upon the disclosures of the cited references alone or in combination. Dependent claims 3 through 10, 13 through 20 and 23 through 30 ultimately depend from independent claims 1, 11 or 21 and incorporate the above discussed patentable features. Therefore, Applicant respectfully submit that the rejections of claims 1, 3 through 10, 11, 13 through 20, 21 and 23 through 30 under 35 U.S.C. §103 should be withdrawn.

The Newly Added Claims

Applicant respectfully requests the Examiner to allow the newly added claims. The newly added claims are supported by the original disclosures of the current application, and no new matter has been introduced to the current application. As indicated by the Examiner in the pending Office Action, newly added independent claims include the subject matter limitations of the objected claims and their intervening claims. Namely, newly added independent claims 31, 32 and 33 respectively include the allowable subject matter limitations of claims 1 and 2; 11 and 12; and claims 21 and 22. Thus, Applicant respectfully submits to the Examiner that newly added claims 31, 32 and 33 should be entered and allowed.

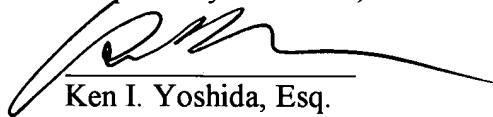
Other Claim Amendment

The additional amendments to claims 3, 4, 5, 6, 7, 13, 14, 15, 16, 17, 23, 24, 25, 26 and 27 are made to clarify the subject matter limitations. No new matter has been introduced by these additional claim amendments.

Conclusion

In view of the above amendments and the foregoing remarks, Applicant respectfully submits that all of the pending claims are in condition for allowance and respectfully request a favorable Office Action so indicating.

Respectfully submitted,



Ken I. Yoshida, Esq.
Reg. No. 37,009

Date: September 3, 2004

KNOBLE YOSHIDA & DUNLEAVY LLC
Eight Penn Center, Suite 1350
1628 John F. Kennedy Blvd.
Philadelphia, PA 19103
(215) 599-0600